DECLARATION

As a below named inventor, I declare that:

My residence, post office address and citizenship are as stated below next to my name; I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: COMPOSITIONS OF ORTHOGONAL LYSYL-tRNA and AMINOACYL-tRNA SYNTHETASE PAIRS AND USES THEREOF the specification of which X is attached hereto or was filed on as Application No., and was amended on (if applicable).

I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56. I claim foreign priority benefits under Title 35, United States Code, Section 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)

| Country | Application No. | Date of Filing | Priority Claimed Under 35 USC 119 |
|---------|-----------------|----------------|--------------------------------------|
| | | | |

I hereby claim the benefit under Title 35, United States Code § 119(e) of any United States provisional application(s) listed below:

| Application No. | Filing Date |
|-----------------|-------------------|
| 60/537,149 | January 15, 2004 |
| 60/528,815 | December 10, 2003 |
| 60/485,451 | July 7, 2003 |

| Application No. | Date of Filing | Status |
|-------------------|----------------|---------|
| PCT/US2004/022187 | July 7, 2004 | Pending |

| Full Name of | Full Name: | | | | |
|--------------|---|--|-------------------------|--|--|
| Inventor 1: | J. Christopher Anderson | | | | |
| Residence & | City: | State/Foreign Country: | Country of Citizenship: | | |
| Citizenship: | San Francisco | California | United States | | |
| Post Office | Post Office Address: | | | | |
| Address: | 124 Mason St., Apt. 401 San Francisco, California 94102 USA | | | | |
| Full Name of | Full Name: | | , | | |
| Inventor 2: | Ning Wu | | | | |
| Residence & | City: | City: State/Foreign Country: Country of Citizenship: | | | |
| Citizenship: | Brookline Massachusetts China | | | | |
| Post Office | Post Office Address: | | • | | |
| Address: | 116 Centre Street, Brookline, Ma | ssachusetts 02138 USA | <u>.</u> | | |
| Full Name of | Full Name: | | | | |
| Inventor 3: | Stephen Santoro | | | | |
| Residence & | City: | State/Foreign Country: | Country of Citizenship: | | |
| Citizenship: | Cambridge | Massachusetts | United States | | |
| Post Office | Post Office Address: | | | | |
| Address: | 1697 Cambridge Street #15, Cam | bridge, Massachusetts 02138 | | | |
| Full Name of | Full Name: | | | | |
| Inventor 4: | Peter G. Schultz | | | | |
| Residence & | City: | State/Foreign Country: | Country of Citizenship: | | |
| Citizenship: | La Jolla | California | United States | | |
| Post Office | Post Office Address: | | | | |
| Address: | 1650 La Jolla Rancho Road, La J | olla, California 92037 | • | | |

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

| Signature of Inventor 1 | Signature of Inventor 2 | Signature of Inventor 3 |
|-------------------------|-------------------------|-------------------------|
| mitter | | |
| . Christopher Anderson | Ning Wu | Stephen Santoro |
| Date 1/19/06 | Date | Date |

Signature of Inventor 4

Peter G. Schultz

Date

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| Full Name of | Full Name: | | | | |
|--------------|---|---|-------------------------|--|--|
| Inventor 1: | J. Christopher Anderson | | · | | |
| Residence & | City: State/Foreign Country: Country of Citizenship: | | | | |
| Citizenship: | San Francisco California United States | | | | |
| Post Office | Post Office Address: | | | | |
| Address: | 124 Mason St., Apt. 401 San Fran | 124 Mason St., Apt. 401 San Francisco, California 94102 USA | | | |
| Full Name of | Full Name: | | | | |
| Inventor 2: | Ning Wu | | | | |
| Residence & | City: State/Foreign Country: Country of Citizenship: | | | | |
| Citizenship: | Brookline | Brookline Massachusetts China | | | |
| Post Office | Post Office Address: | | | | |
| Address: | 116 Centre Street, Brookline, Massachusetts 02138 USA | | | | |
| Full Name of | Full Name: | | | | |
| Inventor 3: | Stephen Santoro | · | | | |
| Residence & | City: | State/Foreign Country: | Country of Citizenship: | | |
| Citizenship: | Cambridge | Massachusetts | United States | | |
| Post Office | Post Office Address: | | | | |
| Address: | 1697 Cambridge Street #15, Cam | bridge, Massachusetts 02138 | 3 | | |
| Full Name of | Full Name: | | | | |
| Inventor 4: | Peter G. Schultz | Peter G. Schultz | | | |
| Residence & | City: | State/Foreign Country: | Country of Citizenship: | | |
| Citizenship: | La Jolla | California | United States | | |
| Post Office | Post Office Address: | | | | |
| Address: | 1650 La Jolla Rancho Road, La J | olla, California 92037 | | | |

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| Signature of Inventor 1 | Signature of Inventor 2 | Signature of Inventor 3 |
|-------------------------|-------------------------|-------------------------|
| | -> 16 | |
| J. Christopher Anderson | Ning Wu | Stephen Santoro |
| Date | Date Jan 19, 2006. | Date |

Signature of Inventor 4

Peter G. Schultz

Date

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| Inventor 1: | J. Christopher Anderson | | | | |
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| Citizenship: | San Francisco | California | United States | | |
| Post Office | Post Office Address: | | | | |
| Address: | 124 Mason St., Apt. 401 San Francisco, California 94102 USA | | | | |
| Full Name of Full Name: | | | | | |
| Inventor 2: | Ning Wu | • | | | |
| Residence & | City: | State/Foreign Country: | Country of Citizenship: | | |
| Citizenship: | Brookline | Massachusetts | China | | |
| Post Office | Post Office Address: | | | | |
| Address: 116 Centre Street, Brookline, Massachusetts 02138 USA | | | | | |
| Full Name of | Full Name: Stephen Santoro | | | | |
| Inventor 3: | | | | | |
| Residence & | City: | State/Foreign Country: | Country of Citizenship: | | |
| Citizenship: | Cambridge | Massachusetts | United States | | |
| Post Office | Post Office Address: | | | | |
| Address: | 1697 Cambridge Street #15, Cambridge, Massachusetts 02138 | | | | |
| Full Name of | Full Name: | | | | |
| Inventor 4: | Peter G. Schultz | | | | |
| Residence & | City: | State/Foreign Country: | Country of Citizenship: | | |
| Citizenship: | La Jolla | California | United States | | |
| Post Office | Post Office Address: | | | | |
| Address: | 1650 La Jolla Rancho Roa | ed, La Jolla, California 92037 | | | |

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| Signature of Inventor 1 | Signature of Inventor 2 | Signature of Inventor 3 | |
|-------------------------|-------------------------|-------------------------|--|
| | | Stephen Santoro | |
| J. Christopher Anderson | Ning Wu | Stephen Santoro | |
| Date | Date | Date 1/29/06 | |

Peter G. Schultz

Date

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| Post Office Post Office Address: | | | | |
| Address: | 116 Centre Street, Brookline, Massachusetts 02138 USA | | | |
| Full Name of | | | | |
| Inventor 3: | | | | |
| Residence & | City: | State/Foreign Country: | Country of Citizenship: | |
| Citizenship: | Cambridge | Massachusetts | United States | |
| Post Office | Post Office Address: | | | |
| Address: | 1697 Cambridge Street #15, Cambridge, Massachusetts 02138 | | | |
| Full Name of | Full Name: | | | |
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| Residence & | City: | State/Foreign Country: | Country of Citizenship: | |
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|-------------------------|-------------------------|-------------------------|
| J. Christopher Anderson | Ning Wu | Stephen Santoro |
| Date | Date | Date |

